

from the lake a depth of 0.00717 feet per day, equal to 30.88 inches per year.

As a rule the entire winter precipitation, generally of snow, is retained on the land and lake surface until about April 1, when all that remains after evaporation is carried very quickly by the spring thaw into the lake.

Further experiments and measurements will be made by means of a weir cut in the dam lately erected by the county at the outlet, and the daily flow determined more accurately, for the purpose of verifying or correcting the estimates of flow herein given. All of which results will be presented to the public in due course of time.

## NOTES BY THE EDITOR.

### CHARLES S. GORGAS.

Mr. Charles S. Gorgas, observer, Weather Bureau, died at Norfolk, Va., 1:30 a. m. January 21, 1899; age 42 years. His death is announced with regret and his connection with the Bureau will be pleasantly remembered by those with whom he was associated. Mr. Gorgas was born in New York City and was educated in the public schools of that city and in the Spencerian Business College at Washington, D. C. He entered the Government meteorological service November 16, 1882, and performed duty at the following-named stations: Cape Henry, Va., Atlanta, Ga., and Norfolk, Va., as assistant; Fort Robinson, Nebr., Fort Laramie, Wyo., Valentine, Nebr., and Savannah, Ga., as official in charge; and at Washington, D. C., as clerk.—*H. E. Williams.*

### METEOROLOGICAL RECORDS IN IOWA.

Mr. J. P. Walton publishes in the Saturday Mail, Muscatine, Iowa, a paper read by him before the Muscatine Academy of Science of February 13, 1899, relative to the early work of Hon. T. S. Parvin. Mr. Parvin settled in Cedar Rapids, Iowa, July 4, 1838, but soon removed to Bloomington, now Muscatine. He apparently began keeping a weather record on December 1, 1838, in diaries and blanks of his own devising; beginning with 1847 he used the Smithsonian blanks. His barometric record began in 1850. In order to get his barometer out to this distant place in 1850, a friend brought it to him from Washington carefully strapped upon his back. When Mr. Parvin moved from Muscatine to Iowa City in October, 1860, he turned over the instruments and records to Rev. John Ufford, and in April, 1863, the latter turned them over to Mr. Josiah P. Walton who now has the complete collection since January 1, 1839.

It is very rare that an observer has the privilege of consulting such a long record at one place, and we hope that Mr. Walton will favor the readers of the MONTHLY WEATHER REVIEW with many studies into the climatic changes that have taken place in Iowa. His paper read before the Muscatine Academy gives us a foretaste of what may be expected. For instance, he finds that in fifty years there have been ten Januaries that have had less than one inch of rainfall. They may be called dry Januaries, and of these ten months he says:

The Februaries that followed were six wet and four dry; the Marches were three wet and four dry, the other three being average; the Aprils were six wet and two dry; the Mays were eight wet and one dry; the Junes were five wet and one dry; the Julys, six wet and one dry, so that on the whole the ten dry Januaries were followed by an increase of precipitation in every month. Of these ten dry Januaries, three were preceded by dry Decembers and two by wet Decembers, the remaining five being average.

Applying this result to the current year, he says:

December, 1898, and January, 1899, were dry, but unless the next six months are an exception to former years, we can look for a better season for grass and for oats than for corn. Oats and grass prosper better with April, May, and June wet and July dry for harvesting. Corn requires but little rain until July, but will stand any amount after shooting.

### HISTORY OF WEATHER TELEGRAPHY.

Mr. William Foster, jr., of Warwick, R. I., sends to the Editor some interesting notes about the early agitation of the question of a Government weather bureau. He states that—

In 1837-39 I published the Windham County Gazette, at Brooklyn, Conn., and occasionally had a paragraph on the subject of the weather, advocating a systematic series of observations to develop the law of storms. I removed to Providence in 1856, where I also had something to say on this subject in the press, insisting that the Government should extend its weather work as widely as possible. Subsequently I reported auroras, meteors, etc., to Prof. Joseph Henry. I recollect that in one of my early paragraphs I instanced a severe damaging West Indian storm, which had traveled up the coast, as an example to illustrate the beneficent results that would have been attained if its progress had been noted and transmitted northward.

### THE TUGRIN FOG DISPELLER.

This consists of an outlook pipe, 8 feet long and 3 inches inside diameter, with a wide flange at the mouth, placed so as to be convenient to the navigating officer. A tube enters the pipe from below and a blower sends a powerful stream of warm air through the tube and the pipe straight ahead, blowing a hole right through the fog, which is rolled back in every direction; the moisture is said to condense and fall in rain-drops, and the navigating officer is enabled to see through the densest fog for several hundred feet.

If this blower operates satisfactorily in a horizontal direction, it ought also to do so in a vertical, and the region around the blower should, therefore, be well wetted by the raindrops that are thus formed out of the fog. It may be an expensive operation, but we commend it to attention on the coast of California, where it is desired to utilize the fog.

### THE INTERNATIONAL DATE.

With the increase in rapid transit and ocean cables across the Pacific, it becomes more and more desirable to adopt a system of dates and hours that will be free from the uncertainties and confusions of the present.

The committee on standard time, which made a report to the American Meteorological Society in 1875, out of which grew the first step in the reformation of time reckoning, concluded its report by expressing a belief that the only permanent, satisfactory solution of the question would consist in using Greenwich time and Greenwich dates throughout the whole globe. The Greenwich day begins, according to our civil reckoning at Greenwich, midnight, which is simultaneous with local noon on the one hundred and eightieth meridian, near the middle of the Pacific Ocean.

The details of the times at which various events have occurred in Europe, Asia, and America, from day to day, as published in our daily telegraphic columns, keep one continually consulting the degrees of longitude and perpetually figuring out how long it is since they happened.

All this is rectified the moment we begin to use one single